

Notice of Allowability	Application No.	Applicant(s)	
	10/633,061	PATEL ET AL.	<i>PRM</i>
	Examiner	Art Unit	
	Daniel I. Walsh	2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. This communication is responsive to 11-29-05.
2. The allowed claim(s) is/are 1-8 and 10-30.
3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All
 - b) Some*
 - c) None
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)
2. Notice of Draftperson's Patent Drawing Review (PTO-948)
3. Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. Notice of Informal Patent Application (PTO-152)
6. Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. Examiner's Amendment/Comment
8. Examiner's Statement of Reasons for Allowance
9. Other _____.

DETAILED ACTION

1. Receipt is acknowledged of the Response received on 29 November 2005.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with George Likourezos on 7 December 2005.

The application has been amended as follows:

Re claim 1, line 6: Replace "provided on a substrate" with -- provided on a substrate including portions for placement of the image sensor and the illumination assembly, wherein the image sensor and the illumination assembly are substantially flush with an outer surface of the substrate upon placement within their respective portions --.

Re claim 9: Cancel claim 9.

Re claim 12, line 8: Replace "imagine engine, and" with – imaging engine, an imaging sensor in operative communication with said interface, and an illumination assembly including at least one illuminating device, wherein the image sensor and the illumination assembly are provided on a single substrate and are substantially flush with an outer surface of the substrate --.

Re claim 16, line 2: Replace “at least one image sensor and a targeting assembly, said at least one” with – a targeting assembly, said --.

Re claim 18, line 5: Replace “reader;” with – reader, said plug-and-play imaging engine further having an image sensor and an illumination assembly provided on a single substrate and being substantially flush with an outer surface of the substrate;

Re claim 19, line 2: Replace “an illumination assembly” with -- the illumination assembly --.

Re claim 20, line 2: Replace “from” with -- form --.

Re claim 21, line 6: Replace “respective substrates,” with -- respective substrates, at least one of said at least two plug-and-play imaging engines having an illumination assembly and an image sensor provided on its respective substrate, the imaging sensor and the illumination assembly being substantially flush with an outer surface of the respective substrate, --

Re claim 22, line 1: Replace “each of said at least two...having” with -- the illumination assembly of said at least one of the at least two imaging engines has at least one illuminating device --.

Re claim 23, line 12: Replace “imagine engine.” with – imaging engine, at least one of the first and second plug-and-play imaging engines has an image sensor and an illumination assembly provided on a single substrate, the imaging sensor and the illumination assembly being substantially flush with an outer surface of the substrate. --

Re claim 27, line 6: Replace “device substantially” with -- device, wherein the at least one illumination device and the image sensor are substantially --.

Allowable Subject Matter

3. Claims 1-8 and 10-30 are allowed.
4. The following is an examiner's statement of reasons for allowance: The prior art of record fails to teach a plug and play imaging as set forth in the claims, including that the imaging engine has an image sensor and an illumination assembly together being substantially flush with an outer surface of the substrate they are on. The Examiner notes that the prior art to Lucera et al. (US 6,874,690) as cited in the previous action teaches a removable laser based scanner, and therefore does not teach a plug and play imaging engine. Correa et al. (US 6,340,114) teaches an imaging engine, but is silent to the image sensor and illumination assembly being provided on a single substrate and flush with the substrate. The Examiner has interpreted plug and play as permitting the imaging engine to be inserted into an optical code reader that is able to accept an engine, and not requiring any reconfiguration in order to be used (hence "plug and play").

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Correa et al. (US 6,340,114).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel I. Walsh whose telephone number is (571) 272-2409. The examiner can normally be reached on M-F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

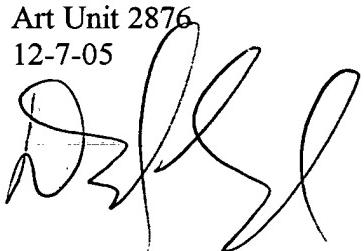
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel I Walsh

Examiner

Art Unit 2876

12-7-05



KARL D. FRECH
PRIMARY EXAMINER